Polymer Degradation and Stability **23** (1989) 397–399

CONTENTS OF VOLUME 23

Number 1

Thermal and Ozone Resistance of Thermoplastic Elastomers Based on 1,2-Polybutadiene 1
S. S. BHAGAWAN (India)

Effect of Concentration and Temperature on the Electrical Conductivity in Butyl Rubber Loaded with Different Types of Carbon Black 9
A. I. EATAH, A. A. GHANI & A. A. HASHEM (Egypt)

Aspects of the Surface Photo-oxidation of Poly 2-(2-hydroxy-3-vinyl-5-methylphenyl)-benzotriazole 19
H. S. MUNRO (UK), F. A. BOTTINO, A. POLLICINO & A. RECCA (Italy)

Primary Thermal Decomposition Processes in Aliphatic Polyamides . . . 25
ALBERTO BALLISTRERI, DOMENICO GAROZZO, MARIO GIUFFRIDA, GIUSEPPE IMPALLOMENI & GIORGIO MONTAUDO (Italy)

Degradation of Cellulose Triacetate Cinematographic Film: Prediction of Archival Life 43
NORMAN S. ALLEN, MICHELE EDGE, JOHN H. APPLEYARD, TERRENCE S. JEWITT, C. VELSON HORIE & DAVID FRANCIS (UK)

Photo-oxidation and Thermo-oxidation of Tetramethylbisphenol-A Polycarbonate 51
AGNÈS RIVATON & JACQUES LEMAIRE (France)

Effect of Thermal Ageing on the Optical Properties of Recycled High Impact Polystyrene 75
MUSTAFA M. F. AL-JARRAH, SALMAN R. SALMAN & SAUDA A. HAMMO (Iraq)

Polymer Complexes: Part VI—Thermal Stability of Poly(2-Acrylamidophenol) Homopolymer and Complexes of Poly(2-Acrylamidophenol) with Some Transition Metal Salts 83
M. A. DIAB, A. Z. EL-SONBATI, A. A. EL-SANABARI & F. I. TAHA (Egypt)

Radiation-Induced Degradation of Polyethylene: Effect of Processing and Density on the Chemical Changes and Mechanical Properties 91
R. GEETHA, A. TORIKAI, S. YOSHIDA, S. NAGAYA, H. SHIRAKAWA & K. FUEKI (Japan)

Number 2

Effect of γ-Irradiation on the Paracrystalline Structure of Polypropylene Film . 99
A. STOYANOV, H. PETKOV, V. KRESTEV, V.VELIKOV & E. NEDKOV (Bulgaria)

Polymer Degradation and Stability **(23)** (1989)—© 1989 Elsevier Science Publishers Ltd, England. Printed in Great Britain

Influence of Low Extents of Degradation on the Processing Behaviour of High Density Polyethylene 109
F. P. LA MANTIA, V. CITTÀ, A. VALENZA & S. ROCCASALVO (Italy)

The Characterization of Polymer Surfaces by Photoacoustic Fourier Transform Infrared Spectroscopy 121
R. O. CARTER III, M. C. PAPUTA PECK & D. R. BAUER (USA)

Studies of the Ageing Behaviour of Gun-grade Building Joint Sealants—The 'State-of-the-Art' 135
ANDREAS WOLF (FRG)

Thermal and Photo-chemical Degradation of Nylon 6,6 Polymer: Part III—Influence of Iron and Metal Deactivators 165
NORMAN S. ALLEN, MICHAEL J. HARRISON, MICHELLE LEDWARD & GORDON W. FOLLOWS (UK)

Structure and Stability of Halogenated Polymers: Part 3—Ring-Brominated Polystyrene 175
I. C. McNEILL & M. ÇOŞKUN (UK)

Diffusion-Controlled Polymer Oxidation 185
S. G. KIRYUSHKIN & YU. A. SHLYAPNIKOV (USSR)

Interaction of the Thermal Decomposition Products of Azodicarbonamide with some Antioxidants in Polyethylene 193
CZESŁAW LATOCHA & MARIA UHNIAT (Poland)

Photo-degradable Polymer Films Derived from Low Density Polyethylene. . 201
RALF GIESSE & MARCO A. DE PAOLI (Brazil)

Number 3

Possible Control of the Mechanical Properties of Nylon-6, Dralon and Polyester Polymers by Neutron Irradiation. 209
M. A. FADEL, F. M. TERA, N. ABDEL-ZAHER & M. A. EL-MESSIERY (Egypt)

Thermomechanical and Some Mechanical Properties of Irradiated Films Prepared from Polymer Blends 217
L. MINKOVA & M. NIKOLOVA (Bulgaria)

On the Photolysis of Poly-4-Chloromethylstyrene and Poly-4-Chloromethylstyrene-co-Styrene in Solution 227
Q. Q. ZHU & W. SCHNABEL (FRG)

Copolymers: Part II—Thermal Degradation of Poly(butylene isophthalate-co-terephthalates) 239
M. S. CHEN, S. J. CHANG, R. S. CHANG, S. M. CHEN & H. B. TSAI (Taiwan)

Photo-oxidative Stability of Electron-Beam and UV Cured Triacrylate Resin Films: Influence of the Structure of the Multifunctional Monomer 245
NORMAN S. ALLEN, PETER J. ROBINSON, NICHOLAS J. WHITE & ROY CLANCY (UK)

Thermal Degradation Behaviour of Acrylonitrile–Indene Copolymers . . 257
M. W. SABAA, M. G. MIKHAEL (Egypt), K. FURUHATA (Japan) &
M. Z. ELSABEE (Egypt)

Photocatalytic Degradation of Polypropylene Film by Dispersed Titanium Dioxide Particles 271
BUNSHO OHTANI, SHUJI ADZUMA, HIROSHI MIYADZU,
SEI-ICHI NISHIMOTO & TSUTOMU KAGIYA (Japan)

Polymer Precursors of Polyacetylene. Thermal Degradation of Poly(Vinyl Esters). Part II—Effect of the *n*-Acyl Chain Length on the Autocatalytic Thermal Degradation of a Homologous Series of Poly(vinyl *n*-alkyl esters) (PV-*n*-AEs) . 279
J. M. BARRALES-RIENDA, M. SÁNCHEZ CHAVES,
J. M. MAZÓN-ARECHEDERRA & F. FERNÁNDEZ-MARTÍN (Spain)

Thermal Degradation of Poly(2-methoxyethyl methacrylate) 299
S. ZULFIQAR, N. AKHTAR, M. ZULFIQAR (Pakistan) &
I. C. McNEILL (UK)

Announcement 309

Number 4

Editorial 311

Fire Retardance in Polymers: An Introductory Lecture 313
J. BROSSAS (France)

Thermal Degradation of Pure and Flame-retarded Polyamides 11 and 12 . . 327
V. MAILHOS-LEFIEVRE, D. SALLET & B. MARTEL (France)

Combustion of Ethylene–Vinyl Acetate Copolymer Filled with Aluminium and Magnesium Hydroxides 337
L. DELFOSSE, C. BAILLET, A. BRAULT & D. BRAULT (France)

Fire Retardance of Polypropylene: Action of Diammonium Pyrophosphate–Pentaerythritol Intumescent Mixture 349
RENÉ DELOBEL, NAJIB OUASSOU, MICHEL LE BRAS &
JEAN-MARIE LEROY (France)

Intumescent Fire-retardant Systems 359
G. CAMINO, L. COSTA & G. MARTINASSO (Italy)

Physical Parameters for a 'Fire Model' which Allows a Comparative Study of Polymer Behaviour in the Case of Fire 377
E. DITTMAR, R. CAPRON, J. M. JOUANY &
M. GUERBET (France)

Large-scale Fire Reaction Tests 385
UMBERTO FLISI (Italy)